

In re: *Nacht*
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REMARKS

No new matter is introduced by the filing of this Preliminary Amendment. Attached hereto as part of this Preliminary Amendment is Substitute Sheet 2 of the Specification.

Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attached page is captioned "Version with markings to show changes made".

No additional fee is deemed necessary in connection with the filing of this communication. However, if any fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 07-1074.

Respectfully submitted,

12/31/02
Date

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DESCRIPTION OF THE FIGURES

-- Figure 1 is a cDNA sequence of Claudin 7 (SEQ ID NO:1).

Normally angiogenesis occurs in humans and animals in a very limited set of circumstances, such as embryonic development, wound healing, and formation of the corpus luteum, endometrium and placenta. However, aberrant angiogenesis is associated with a number of disorders, including, tumor metastasis. In fact, it is commonly believed that tumor growth is dependent upon angiogenic processes. Thus, the ability to increase or decrease angiogenesis has significant implications for clinical situations, such as wound healing (e. g., graft survival) or cancer therapy, respectively.

DESCRIPTION OF THE FIGURES

Fig. 1 is a cDNA sequence of Claudin 7 (SEQ ID NO:1).

SUMMARY OF THE INVENTION

By this invention, Claudin 7 is identified as a gene overexpressed in breast cancer. Using SAGE analysis [Velculescu, V. E., L. Zhang, B. Vogelstein, and K. W. Kinzler. Serial analysis of gene expression. Science. 1995. 270(5235): p.484-7] combined with cDNA arrays, it was found that Claudin 7 was overexpressed at least 100-fold by 85% of primary tumors examined and greater than 10-fold by all metastatic tumors examined (when compared to expression in normal human mammary epithelial cells). Thus, the expression pattern of Claudin 7 suggests that it plays a role in promoting or maintaining tumorigenesis, perhaps by altering adhesion properties of the cells and/or by allowing the flow of soluble growth factors or angiogenic molecules that are normally prevented from passing. Alternatively, Claudin 7 may create a barrier against angiogenesis inhibitors and/or proteins that hinder cell growth.

Claudin 7 is a Claudins are proteins found in the specialized membrane domain of epithelial and endothelial cells known as tight junctions. In addition to facilitating cell-cell